

REMARKS

Claim 1 has been amended to refer to a radial block copolymer component which comprises a $(PS-PI-PB)_nX$ radial block copolymer. Claims 3 and 4 has also been amended to recite that the radial block copolymer component also contains SIB, i.e., a diblock, in amounts of less than 25 % (claim 3) or less than 20 % (claim 4) based on the weight of the radial triblock component. A similar amendment has been made to claim 10. No new matter has been added. Entry is requested.

The examiner continues to reject claims 3 and 4 under 35 U.S.C. 112, second paragraph, as being indefinite in reciting that the radial copolymer is part di-block. Applicants again disagree and assert that the claim language would be readily understood by one of ordinary skill in this art. Again, as set forth in applicants' disclosure, and within the disclosure of the Lechat U.S. patent application (US 2005/0020773) cited and applied by the examiner, the recited diblock content is an indication of the coupling efficiency. The terminology used in applicants' claims would not be indefinite to one of ordinary skill in the art. Due to coupling inefficiency, such polymers are conventionally described as a polymer with a percentage description of diblock. While applicants submit that claims 3 and 4 clearly and distinctly claimed the invention, the claims have been amended further to clarify the components of the claimed adhesive.

Withdrawal of this Section 112, second paragraph, rejection is requested.

Claims 1, 2 and 6-9 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Lechat et al. (US2005/0020773). Applicants disagree.

Applicants disagree. The disclosure of Lechat would not render the invention obvious.

to one of ordinary skill in the art.

Lechat is directed to radial block copolymer compositions. The rubbers are described by Lechat as useful in the manufacture of pressure sensitive adhesive compositions for labeling applications. The radial block copolymers of Lechat are prepared by controlling the coupling efficiency of the coupling reaction so that at least 40 wt % of the di-block material remains uncoupled. As disclosed in paragraphs [0068] to [0071] the rubbers used in the adhesives of Lechat comprise from 10-35 wt %, more preferably from about 15 to 22 wt %, of styrene, and a minimum of at least 40 wt %, most preferable 70 wt % of di-block content. Paragraph [0116] referred to by the examiner characterizes the polymer as containing 49.1 % di-block and having a styrene content of 16.6 wt %. A polymer of the type disclosed for use in applicants claimed hot melt adhesive would not be obvious from the disclosure of Lechat.

Lechat fails to disclose a hot melt adhesive comprising a radial block copolymer (PS-PI-PB)_nX having a styrene content of from 25 wt % to about 50 wt %, a linear block copolymer, and a tackifying resin, and wherein, based on the weight of the adhesive composition, the radial block copolymer is present in amounts of from 15 wt % to about 35 wt %, the linear polymer is present in amounts up to about 20 wt %, the tackifying resin is present in amounts of from about 30 to about 70 wt %.

The Lechat rubber is described as being formulated into pressure sensitive adhesive compositions useful in labeling end uses. Such adhesives would not be suitable for use as an elastic attachment adhesive.

Reconsideration and withdrawal of the rejection of claims 1, 2 and 6-9 as being obvious over Lechat is requested.

Claims 1-4 and 6-12 are rejected under 35 U.S.C. 102 (b) as being anticipated by Diehl et al. (US 5,292,819). The examiner again refers to Examples 1-4 and to Table 1 (col. 14).

Applicants disagree. Diehl does not anticipate applicants' claimed invention, which requires the presence of a linear block copolymer. Diehl fails to disclose the presence of a linear block copolymer, and the examiner fails to provide evidence that linear block copolymer would be a present by-product in the manufactured radial block copolymer. As such, Diehl fails to anticipate the claimed invention.

Claims 1-4 and 6-12 are not anticipated by Diehl. Withdrawal of this rejection is requested.

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kueppers (US 5,939,483). While the examiner again acknowledges that no specific examples exist having all applicants combination of materials, the examiner urges that the disclosure of Kueppers lies within the broad ambit of the claims.

Applicants disagree. There is no disclosure which would motivate the skilled artisan to make the adhesive claimed by applicants. Moreover, the adhesive of Kueppers is described for use in packaging applications. See Table 1 (col. 10), in which the adhesive examples are reported to have viscosities ranging from 1100 to 1470 cPs and 150°C. Such an adhesive would not be useful as an elastic attachment adhesive.

Claims 1-4 and 6-11 are not obvious over Kueppers. Withdrawal of this rejection is requested.

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102 (b) as being anticipated by

Asahara (US 5,532,319).

Applicants disagree.

Asahara discloses block copolymer compositions having specific combinations and types of block copolymers and pressure sensitive adhesive prepared using the block copolymer compositions of the invention as the base polymer component of the adhesive. The block copolymer compositions are formulated for pressure sensitive applications and comprise 20-90 wt % of a of a (S-B-I)_n-X and/or (S-I-B)_n-X block copolymer where n=2, 3 or 4 and from 80-10 of a SBI or SIB diblock. While Asahara discloses compositions that contain (S-B-I)_n-X wherein x is 2-4, there is no exemplification, or even a general disclosure of the use of any polymer composition comprising (S-B-I)₃-X let alone in amounts of from 15 to 35 wt %. There is no disclosure of use of 15-35 wt % of (S-B-I)₃-X with not more than about 20 wt % of a linear triblock as disclosed and claimed by applicants. A polymer of the type disclosed for use in applicants claimed hot melt adhesive is not anticipated by the disclosure of Asahara.

Claims 1-4 and 6-9 are not anticipated by Asahara. Withdrawal of this rejection is requested.

The examiner maintains the obviousness-type double patent rejection of the claims over copending commonly assigned application Serial Nos. 10/779,420. The examiner urges that the scope of the claims overlap.

The claims of application Serial No. 10/779,420 are directed to adhesive formulations containing a radial block copolymer (PS-PI-PB)_nX in amounts of less than 15 wt %. In contrast, the claims of the subject application are directed to adhesive formulations containing

a radial block copolymer (PS-PI-PB)_nX in amounts of from 15 wt % to about 35 wt %. The claims of the subject application are not obvious variations of the invention claimed in application Serial Nos. 10/779,420.

The examiners assertion that applicants claim that some of the radial block copolymer is a diblock is without merit.

Applicants submit that the obviousness-type double patenting rejection is improper. Withdrawal is requested.

Early and favorable action is requested.

Respectfully submitted,

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